

Appl. No.: 10/609,140
Amdt. Dated: 10/28/2005
Off. Act. Dated: 06/28/2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (cancelled)

2. (currently amended): ~~An apparatus as recited in claim 1, wherein said means for receiving a pressurized fluid, allowing said fluid flow to flow when the pressure of the fluid exceeds a bias level, and preventing fluid flow when the pressure of the fluid falls below the bias level, comprises:~~ An anti-sputter fluid flow control apparatus, comprising:

a valve body;

said valve body having an intake port, a central channel and an output port;

a chamber disposed in said central channel;

a valve seat disposed within said ~~central channel~~ chamber; and

a biased valve head;

said valve head having a cylindrical body;

said valve head having a generally rounded contact surface;

wherein said valve seat has a seat surface adapted to mate with said rounded contact surface of said valve head;

a bore in said valve seat fluidly connecting said intake port and said seat surface;
and

means for increasing and decreasing the bias on said valve head;

said valve head configured to allow fluid to flow between said intake port and said output port when the pressure of said fluid is sufficient to overcome the bias on said valve head;

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said valve head configured to engage said valve seat when the pressure of the flow of fluid drops to a level insufficient to overcome the bias on said valve head.

3. (original): An apparatus as recited in claim 2, wherein said means for increasing and decreasing the bias on said valve head comprises:

a spring configured to be adjustably compressed; and
means for adjusting the compression of said spring.

4. (original): An apparatus as recited in claim 3, wherein said means for adjusting the compression of said spring comprises a rotatable member positioned in said valve body.

5. (currently amended): An apparatus as recited in claim 1, 2, 3 or 4, further comprising:

a spray nozzle in fluid communication with said output port.

6. (currently amended): An anti-sputter fluid flow control apparatus, comprising:
a valve body;

said valve body having an intake port, a central channel and an output port;

an internally threaded chamber disposed in said central channel;

wherein said threaded chamber has a recess;

a valve seat disposed within said ~~central channel~~ threaded chamber;

wherein said valve seat has a top surface and a bottom surface;

wherein said top surface of said valve seat has a flange adapted to fit in said recess of said threaded chamber;

a biased valve head;

said valve head having a cylindrical body;

said valve head having a generally rounded contact surface;

wherein said bottom surface of said valve seat has a seat surface adapted to mate with said rounded contact surface of said valve head;

a bore in said valve seat fluidly connecting said intake port and said seat surface;

wherein said flange aligns said bore with said intake port;

an annular retainer having external threads adapted to retain said valve seat in said threaded chamber;

said valve head configured to allow fluid to flow between said intake port and said output port when the pressure of said fluid is sufficient to overcome the bias on said valve head;

said valve head configured to engage said valve seat when the pressure of the flow of fluid drops to a level insufficient to overcome the bias on said valve head; and means for increasing and decreasing the bias on said valve head.

7. (original): An apparatus as recited in claim 6, wherein said means for increasing and decreasing the bias on said valve head comprises:

a spring configured to be adjustably compressed; and

means for adjusting the compression of said spring.

8. (original): An apparatus as recited in claim 7, wherein said means for adjusting the compression of said spring comprises a rotatable member positioned in said valve body.

9. (original): An apparatus as recited in claim 6, 7 or 8, further comprising:

a spray nozzle in fluid communication with said output port.

10. (currently amended): An anti-sputter fluid flow control apparatus, comprising:

a valve body;

said valve body having an intake port, a central channel and an output port;
a valve seat disposed within said central channel;
a biased valve head;
said valve head having a cylindrical body;
said valve head having a generally rounded contact surface;
wherein said valve seat has a seat surface adapted to mate with said rounded
contact surface of said valve head;
a bore in said valve seat fluidly connecting said intake port and said seat surface;
wherein the diameter of said bore in said valve seat is smaller than said output
port;
said valve head configured to allow fluid to flow between said intake port and
said output port when the pressure of said fluid is sufficient to overcome the bias on
said valve head;
said valve head configured to engage said valve seat when the pressure of the
flow of fluid drops to a level insufficient to overcome the bias on said valve head;
a spring configured to be adjustably compressed; and
means for adjusting the compression of said spring.

11. (original): An apparatus as recited in claim 10, wherein said means for
adjusting the compression of said spring comprises a rotatable member positioned in
said valve body.

12. (original): An apparatus as recited in claim 10 or 11, further comprising:
a spray nozzle in fluid communication with said output port.

13. (currently amended) An anti-sputter fluid flow control apparatus, comprising:
a valve body;
said valve body having an intake port, a central channel and an output port;

an internally threaded chamber disposed in said central channel;
wherein said threaded chamber has a recess;
a valve seat disposed within said ~~central channel~~ threaded chamber;
wherein said valve seat has a top surface and a bottom surface;
wherein said top surface of said valve seat has a flange adapted to fit in said
recess of said threaded chamber;
a biased valve head;
said valve head having a cylindrical body;
said valve head having a generally rounded contact surface;
wherein said bottom surface of said valve seat has a seat surface adapted to
mate with said rounded contact surface of said valve head;
a bore in said valve seat fluidly connecting said intake port and said seat surface;
wherein said flange aligns said bore with said intake port;
wherein the diameter of said bore in said valve seat is smaller than said output
port;
an annular retainer having external threads adapted to retain said valve seat in
said threaded chamber;
said valve head configured to allow fluid to flow between said intake port and
said output port when the pressure of said fluid is sufficient to overcome the bias on
said valve head;
said valve head configured to engage said valve seat when the pressure of the
flow of fluid drops to a level insufficient to overcome the bias on said valve head;
a spring configured to be adjustably compressed; and
a rotatable member positioned in said valve body and configured for adjusting
the compression of said spring.

14. (original): An apparatus as recited in claim 13, further comprising:
a spray nozzle in fluid communication with said output port.

15. (currently amended): An anti-sputter fluid flow control apparatus, comprising:

- a valve body further comprising an inlet member and an outlet member;
- ~~said valve body~~ inlet member having an intake port, and a central channel ~~and an output port;~~
- said outlet member having a central channel and an output port;
- an internally threaded chamber disposed in said central channel of said inlet member;
- wherein said threaded chamber has a recess;
- a valve seat disposed within said ~~central channel~~ threaded chamber;
- wherein said valve seat has a top surface and a bottom surface;
- wherein said top surface of said valve seat has a flange adapted to fit in said recess of said threaded chamber;
- a biased valve head;
- said valve head having a cylindrical body;
- said valve head having a generally rounded contact surface;
- wherein said bottom surface of said valve seat has a seat surface adapted to mate with said rounded contact surface of said valve head;
- a bore in said valve seat fluidly connecting said intake port and said seat surface;
- wherein said flange aligns said bore with said intake port;
- an annular retainer having external threads adapted to retain said valve seat in said threaded chamber;
- said valve head configured to allow fluid to flow between said intake port and said output port when the pressure of said fluid is sufficient to overcome the bias on said valve head;
- said valve head configured to engage said valve seat when the pressure of the flow of fluid drops to a level insufficient to overcome the bias on said valve head;
- a spring configured to be adjustably compressed;

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a rotatable member positioned in said ~~valve body~~ outlet member and configured for adjusting the compression of said spring; and
a spray nozzle in fluid communication with said output port.

16. (new): An apparatus as recited in claim 15, wherein the diameter of said bore in said valve seat is smaller than said output port.